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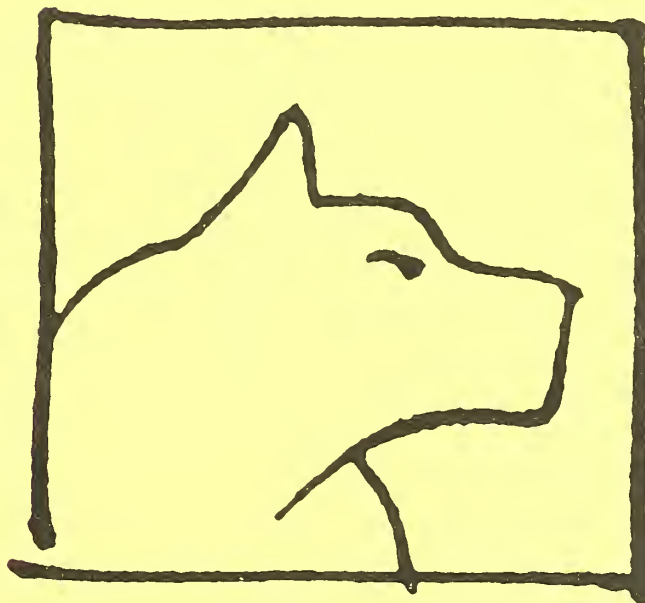
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# Reference Materials for Members of Animal Care and Use Committees

AWIC Series #10



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# **Reference Materials for Members of Animal Care and Use Committees**

**AWIC Series #10**

**D'Anna J. Berry  
Animal Welfare Information Center**



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## INTRODUCTION

Recent congressional amendments to the Animal Welfare Act mandated research facilities to establish Institutional Animal Committees to ensure the humane treatment of research animals. In compliance with the amendments, all such committees must be composed of no less than three members. Of these, at least one member "shall not be affiliated in any way with such facility other than as a member of the committee..." and "is intended to provide representation for general community interests in the proper care and treatment of animals...". Because no specific educational or occupational stipulations have been assigned to non-affiliated members, these members represent an array of vocations and educational levels. While some non-affiliated members may have extensive research backgrounds, others may grapple with basic scientific terminology and concepts. It is in recognition of the broad information requirements of some non-affiliated members that this bibliography has been developed.

This bibliography is not meant to be a comprehensive collection of materials on the subject of animal research or protocol review. It is meant, however, to serve as an introduction and guide to materials which may be helpful to the Animal Care and Use committee member for ensuring humane treatment of animals used in research.

Most of the materials contained in this listing are held in the collection of the National Agricultural Library (NAL) and are available for loan. Publications which are not held by NAL but are available from other sources may be listed with a contact address.

Finally, the preparer would like to acknowledge the generous assistance of Dr. Taylor Bennett in the preparation of this document.



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## SCIENTIFIC AND MEDICAL TERMINOLOGY

**Black's Veterinary Dictionary.** 16th edition. Edited by G. West. Totowa, NJ: Barnes & Noble Books, 1988.

NAL Call No: SF609.M5.

**Note:** An illustrated dictionary containing information on animal anatomy, physiology, diseases, medicine, and research.

**Dorland's Illustrated Medical Dictionary.** 27th edition. Philadelphia, PA: W.B. Saunders Company, 1988.

NAL Call No: R121.D6.

**Note:** An illustrated dictionary of medical terms.

**Mastering Medical Language.** A.L. Spatola. Englewood Cliffs, NJ: Prentice-Hall, Inc., 1982.

NAL Call No: R123.S64.

**Note:** Chapter 1 provides a step-by-step analysis of the basic components of medical words. Chapters 2 and 3 list common suffixes and prefixes. The rest of the book deals with terminology for each of the body systems. Illustrated.

**Saunders Dictionary and Encyclopedia of Laboratory Medicine and Technology.** Edited by J.L. Bennington. Philadelphia, PA: W.B. Saunders Company, 1984.

NAL Call No: RB37.B453.

**Note:** Provides comprehensive coverage of the methods of laboratory analysis and terms related to laboratory medicine.

**Taber's Cyclopedic Medical Dictionary.** 16th edition. Edited by C.L. Thomas. Philadelphia, PA: F.A. Davis Company, 1990.

NAL Call No: R121.T144.

**Note:** A dictionary of medical terminology.

**Understanding Medical Terminology.** 8th edition. A.C. Frenay and R.M. Mahoney. Dubuque, IA: Kendall/Hunt Publishing Company, 1989.

NAL Call No: R123.F7.

**Note:** An illustrated guide explaining biomedical terminology.

## LABORATORY AND SURGICAL PROCEDURES

**Animal Physiologic Surgery.** Edited by C.M. Lang. New York, NY: Springer-Verlag, 1982.

NAL Call No: SF768.L29.

**Note:** This book introduces the novice to surgery using animal models. It covers sterile technique, instrumentation, and some basic surgical and laboratory procedures.

**Current Techniques in Small Animal Surgery.** Edited by M.J. Bojrab. Philadelphia, PA: Lea and Febiger, 1990.

NAL Call No: SF911.A1C8.

**Note:** An extensive reference guide to veterinary surgical techniques organized by body systems. Numerous illustrations clarify the advanced text.

**Essentials of Experimental Surgery.** J.S.P. Lumley, C.J. Green, P. Lear and J.E. Angell-James. Boston, MA: Butterworth and Co. Ltd., 1990.

NAL Call No: RD29.E8.

**Note:** This book provides information on the selection and care of laboratory animals, including their housing and husbandry, plus comprehensive details on anaesthesia, tissue surgery, microsurgery, regional surgery, post-operative care and biological measurement techniques. It is a useful tool for surgeons involved in experimental work, as well as veterinary surgeons and research technicians.

**A Guide to Laboratory Animal Technology.** M.D. Buckland, L. Hall, A. Mowlem and B.F. Whatley. London, England: William Heinemann Medical Books Ltd., 1981.

NAL Call No: QL55.G82.

**Note:** Discusses common laboratory species with regard to anatomy, reproduction, husbandry, handling, diseases, and laboratory manipulations. Appendix 1 is a useful reference for basic biological and animal management information.

**Laboratory Animals: An Introduction for New Experimenters.** Edited by A.A. Tuffery. New York, NY: John Wiley & Sons Ltd., 1987.

NAL Call No: QL55.L274.

**Note:** A basic reference for many aspects of research animal care and use. Of particular interest are chapters on experimental design, standards of surgery, drug administration, and non-surgical experimental procedures.

**Laboratory Procedures for Animal Health Technicians.** Edited by P.W. Pratt. Santa Barbara, CA: American Veterinary Publications, Inc., 1985.

NAL Call No: SF772.6.L32.

**Note:** Explains the logic behind many laboratory procedures involving animals and describes how they are performed. Chapters include information on laboratory tests of blood, urine, organ function, bacteria, and immunity.



## **ANATOMY**

**The Anatomy of the Domestic Animals.** 5 volumes. R. Nickel, A. Schummer, E. Seiferle, J. Frewein, H. Wilkens and K.H. Wille. Berlin, Germany: Verlag Paul Parey, 1986.  
NAL Call No: SF761.L432.

**Note:** An exhaustive illustrated anatomical reference. Volume 1- The Locomotor System of the Domestic Mammals; Volume 2- The Viscera of the Domestic Mammals; Volume 3- The Circulatory System, The Skin, and The Cutaneous Organs of the Domestic Mammals; Volume 4- The Nervous System, The Endocrine Glands, and The Sensory Organs of the Domestic Mammals; Volume 5- Anatomy of the Domestic Birds.

**Animal Anatomy and Physiology.** J.F. Bone. Englewood Cliffs, NJ: Prentice Hall, 1988.  
NAL Call No: SF761.B64.

**Note:** Provides a basic understanding of animal structure and function.

**Veterinary Anatomy: Basic, Comparative, and Clinical.** M.J. Shively. College Station, TX: Texas A&M University Press, 1984.  
NAL Call No: SF761.S5.

**Note:** Readable summary of the essentials of veterinary anatomy of the major domestic species: horse, ox, pig, dog, cat, birds, and common laboratory animals.

## **ANALGESIA, ANESTHESIA, EUTHANASIA, AND PHARMACOLOGY**

**American Veterinary Medical Association Report of the Panel on Euthanasia.** *Journal of the American Veterinary Medical Association* 188(3):252-268(1986).  
NAL Call No: 41.8 Am3.

**Note:** Presents a comprehensive list of chemical and physical methods of euthanasia, and discusses the advantages and disadvantages of each.

**Anaesthetic and Sedative Techniques for Fish.** Lindsay G. Ross and Barbara Ross: Sterling, Scotland: Institute of Aquaculture, University of Scotland, 1984.  
NAL Call No: SH156.9.R6.

**Note:** A comprehensive guide to anaesthetic and sedative techniques for fish used in laboratory and field research.

**Anesthetic Principles and Techniques.** D.C. Sawyer, A.T. Evans, D.J. DeYoung and D.B. Brunson. East Lansing, MI: Michigan State University Press, 1981.  
NAL Call No: SF914.A52.

**Note:** This manual offers basic information on the use and administration of anesthetic agents.



**Drug Dosage in Laboratory Animals: A Handbook.** C.D. Barnes and L.G. Eltherington. Los Angeles, Ca: University of California Press, 1973.

NAL Call No: QP905.B32.

**Note:** This handbook is a concise reference source of available drug dosage in the mouse, rat, guinea pig, rabbit, cat, dog, and monkey. Parenteral and oral routes of administration are included. Appendices include hormone maintenance and physiological solutions.

**Guidelines on the Care of Laboratory Animals and Their Use for Scientific Purposes: II - Pain, Analgesia and Anaesthesia.** Potters Bar, Herts, England: Universities Federation for Animal Welfare, 1989.

NAL Call No: SF406.G8 v.2.

**Note:** This document provides recommendations for recognizing the signs of animals in pain, minimizing pain by preventive measures and controlling pain by use of analgesic and anesthetic agents. It also gives some guidelines for post-anaesthetic care of laboratory animals.

**Laboratory Animal Anaesthesia: An Introduction for Research Workers and Technicians.** P.A. Flecknell. New York, NY: Academic Press, 1987.

NAL Call No: SF77.F5.

**Note:** This handbook provides basic information about anesthesia to research technicians who have not received extensive training in this field. Sections are devoted to the principles of pre-operative and post-operative care, anesthetic techniques and equipment, and pain recognition and alleviation.

**Veterinary Anaesthesia.** L.W. Hall and K.W. Clarke. London, England: Bailliere Tindall, 1983.

NAL Call No: SF914.W7.

**Note:** General introduction to the principles and procedures of anesthetics and their application to domestic mammals, birds, and laboratory animals.

**Veterinary Pharmacology and Therapeutics.** Edited by N. H. Booth and L. E. McDonald. Ames, Iowa: Iowa State University Press, 1988.

NAL Call No: SF915.J6.

**Note:** This book is directed to veterinary students, veterinarians, and those engaged in laboratory animal medicine and biological research. The pharmacologic, therapeutic, and toxicologic activities of drugs are addressed, as well as the use of drugs in food-producing animals. Information has been included on veterinary drugs used in exotic and laboratory animal species.

## **PAIN ASSESSMENT**

**Animal Consciousness.** D.Radner and M. Radner. Buffalo, NY: Prometheus Books, 1989.

NAL Call No: QL785.25.R34.

**Note:** A look at animal consciousness through the philosophy of Descartes thought. This is a philosophical view of animal and human consciousness and awareness.

**Animal Pain: Evaluation and Control.** E.M. Wright, K.L. Marcella, and J.F. Woodson. *Lab Animal* 14(4):20-36 (1985).

NAL Call No: QL55.A1L33.

**Note:** The authors define terms related to pain and pain relief. Methods of pain recognition, assessment, classification, and control are also described. Particular attention is given to the application and effects of specific pain relieving drugs.

**Animal Pain: Perception and Alleviation.** Edited by R. L. Kitchell and H.H. Erickson. Bethesda, MD: American Physiological Society, 1983.

NAL Call No: QP451.4.A54.

**Note:** A source of basic information about the perception and alleviation of pain in animals for scientific investigators, veterinarians, and federal, state and local regulators of the use of animals in research, education, and product testing. Scientists present papers on pain perception and how it can be evaluated scientifically. Alleviation of pain covers absorption of drugs by various species and the evaluation of analgesics in dogs, cats and horses.

**Assessing Pain in Farm Animals: Proceedings of Commission of European Communities Workshop, October, 1984.** Brussels, Belgium: Commission of European Communities, 1986.

NAL Call No: HV4704.A77.

**Note:** Collection of papers which discuss methods of assessing pain in farm animals using behavior, psychological responses and brain activity.

**Animal Suffering: The Science of Animal Welfare.** M.S. Dawkins. London, England: Chapman and Hall, 1980.

NAL Call No: HV4708.D3.

**Note:** Written for the non-scientist, this book examines methods for assessing animal suffering and mental well-being. Criteria used for evaluation include: physical health, productivity, behavior, physiological measurements, animal choice, and analogies to human suffering and stress.

**The Challenge of Pain.** R. Melzak and P. Wall. New York, NY: Basic Books, Inc., 1983.  
NAL Call No: QP451.4.M44.

**Note:** Lengthy discussion of the mechanisms and theories of pain and pain control. A glossary of terms related to pain and the nervous system is provided. Though written with respect to humans, it is applicable to animals.

**The Detection and Relief of Pain in Animals.** Edited by T.E. Gibson. London, England: British Veterinary Association Animal Welfare Foundation, 1986.  
NAL Call No: HV4704.A54.

**Note:** The proceedings of a conference devoted to recognizing, assessing, and relieving pain in animals. Part III describes techniques for assessing pain, stress, and discomfort in small mammals, dogs, cats, horses, ruminants, pigs, birds, primates, and fish.

**Guidelines for the Recognition and Assessment of Pain in Animals.** Association of Veterinary Teachers and Research Workers. *The Veterinary Record* 118:334-338 (1986).  
NAL Call No: 41.8 V641.

**Note:** "Stress" and "pain" are defined. The article discusses the systematic assessment of pain and describes species specific signs of suffering.

**Guidelines on the Recognition of Pain, Distress, and Discomfort in Experimental Animals and an Hypothesis for Assessment.** D.B. Morton and P.H.M. Griffiths. *The Veterinary Record* 116:431-436 (1985).  
NAL Call No: 41.8 V641.

**Note:** Describes clinical signs and behaviors which indicate pain and stress in common laboratory animals and presents a scoring system to assess the magnitude of suffering.

**Panel Report on the Colloquium on Recognition and Alleviation of Animal Pain and Distress.** *Journal of the American Veterinary Medical Association* 191(10): 1186-1192 (November 15, 1987).  
NAL Call No: 41.8 Am3

**Note:** A panel of veterinarians defines a variety of terms: pain, suffering, anxiety, fear, distress, discomfort, injury. Very general discussions of the physiology of pain and its alleviation are also offered.

**The Recognition of Pain, Distress and Discomfort in Small Laboratory Mammals and Its Assessment.** D.B. Morton. Leicester, England: University of Leicester, 1985.  
NAL Call No: HV4735.M67.

**Note:** This covers the recognition of pain, distress, and discomfort in small mammals such as rats, mice, guinea pigs, and rabbits. Signs of pain, distress, and discomfort for each species are examined and rated.

## **HUMANE ANIMAL CARE AND USE**

**Animal Care and Use in Behavioral Research: Regulations, Issues, and Applications.** Edited by J. W. Driscoll. Beltsville, MD: National Agricultural Library, September, 1989.

NAL Call No: aHv4762 A3A64.

**Note:** Compiled information based on an invited paper session at the 1988 meeting of the Animal Behavior Society. The papers are organized in three sections. The first covers current regulations in the United States and Canada and methods for complying; The second covers some general regulatory issues; The third describes methods for improving conditions for captive animals.

**Comfortable Quarters for Laboratory Animals.** Washington, DC: Animal Welfare Institute, 1979.

NAL Call No: SF91.A5.

**Note:** Outlines principles of research animal housing with respect to physical and psychological comfort. Covers housing for primates, cats, dogs, rodents, rabbits, birds, and amphibians.

**CRC Handbook of Laboratory Animal Science.** 3 Volumes. Edited by E.C. Melby, Jr. and N.H. Altman. Boca Raton, FL: CRC Press, 1974.

NAL Call No: QL55.M45.

**Note:** This three volume set provides comprehensive coverage of many aspects of laboratory animal science. Legislation, housing and care, laboratory equipment, gnotobiotics, animal models, medicine, and experimental techniques are among the topics discussed. Portions of the text are rather technical but much of it is comprehensible to the layperson.

**CRC Handbook of Marine Mammal Medicine: Health, Disease, and Rehabilitation.** Edited by L.A. Dierauf. Boca Raton, FL: CRC Press, 1990.

NAL Call No: SF997.5.M35C7.

**Note:** This book addresses the areas of medicine, surgery, pathology, physiology, feeding and housing, husbandry, stranding and rehabilitation, as well as the natural history of cetaceans, pinnipeds, manatees, sea otters, and polar bears. The book is designed to assist professionals involved in marine mammal health care, wildlife biologists who study these animals in their natural environments, and scientists conducting research on captive and wild marine mammals.



**Education and Training in the Care and Use of Laboratory Animals - A Guide for Developing Institutional Programs.** National Research Council. Washington, D.C: National Academy Press, 1991.

NAL Call No: SF604.E3.

**Note:** This provides the guidelines and resources needed to develop a quality training program that meets existing regulations. This guide provides: content on topics from ethics to record keeping; lists sources of additional publications, audiovisual programs, and computerized programs; and includes teaching outlines and directions on how to design training programs for technical staff and investigators.

**Essentials for Animal Research - A Primer for Research Personnel.** B. T. Bennett, M. J. Brown and J. C. Schofield. USDA/NAL. Distributed by AALAS 70 Timber Creek Drive, Suite 5, Cordova, TN 381018. 1990.

NAL Call No: QL55.B36.

**Note:** A manual providing basic knowledge on the use and handling of laboratory animals. Regulations, requirements, alternatives, anesthesia and analgesia, perioperative care, and euthanasia are some of the subjects discussed. It addresses the responsibilities that researchers assume when using animals.

**Ethical Standards and Guidelines for Animal Experiments in Toxicological Research.** *Toxicon* 24(4): 327-330 (1986).

NAL Call No: 391.8 T66.

**Note:** Developed by members of the International Society for Toxicology, these guidelines establish a standard code of practice for the use of animals in toxicology research.

**Guide for the Care and Use of Laboratory Animals.** Prepared by the Committee on Care and Use of Laboratory of the Institute of Laboratory Animal Resources, Commission of Life Sciences, National Research Council. Bethesda, MD: U.S. Department of Health and Human Services, Public Health Service, National Institutes of Health, 1985.

NAL Call No: SF406.N32.

**Note:** This guide is accepted by the scientific community as the primary reference on animal care and use. It's purpose is to assist institutions in caring for and using laboratory animals in ways that are professionally and humanely appropriate. The recommendations are based on published data, scientific principles, expert opinion, and experience with methods and practices that provide high quality humane animal care and use. The *Guide* provides information on common laboratory animals. It is not an exhaustive review of all aspects of animal care and use.

**Guide to the Care and Use of Experimental Animals.** 2 Volumes. Ontario, Canada: Canadian Council on Animal Care, 1980 and 1984. Copies available from: CCAC, 1105-151 Slater Street, Ottawa, Ontario K1P 5H3.

NAL Call No: SF406.C36.

**Note:** A reference guide for the humane care and use of animals used in research, teaching, and testing. Volume 1 includes a discussion of the Canadian oversight committee system, an outline of proper animal holding facilities, and standards for experimental animal surgery, anesthesia, euthanasia. Volume 2 presents guidelines for the care and handling of a variety of experimental vertebrate animals.

**Guidelines for Ethical Conduct in the Care and Use of Animals.** Washington, DC: American Psychological Association, 1985. Available from: APA, P.O. Box 2710, Hyattsville, MD 20784.

NAL Call No: QL55.G84.

**Note:** Guidelines developed by the American Psychological Association for psychologists to ensure humane care and use of animals in research and education.

**Guidelines for the Well-being of Rodents in Research.** Edited by Helene N. Guttman. Bethesda, MD: Scientists Center for Animal Welfare, 1990.

NAL Call No: HV4704.G8.

**Note:** Articles from a conference held by the Scientists Center for Animal Welfare in Research Triangle Park, North Carolina on December 8, 1989, with additional materials provided by the authors. Current regulations, nutrition, cage size, toxicology, pain, stress, surgical techniques, and euthanasia are addressed.

**Humane Care and Use of Laboratory Animals.** [Videorecording]. Raleigh, NC: Laboratory Animal Training Association, 1988. 1/2" VHS, 32 min.

NAL Call No: Videocassette No. 338 Vol.1.

**Note:** This videotape introduces and surveys aspects of humane laboratory animal care and use. It covers the Animal Welfare Act and other legislation, government guidelines for humane laboratory animal care, ethical viewpoints, roles and responsibilities of research staff and institutional animal care and use committee members, humane experimentation, alternatives, and sources of additional information. Manual is included.

**The Importance of Animal Experimentation for Safety and Biomedical Research.** Edited by S. Garattini and D.W. van Bekkum. Dordrecht, The Netherlands: Kluwer Academic Publishers, 1990.

NAL Call No: R853.A53I46.

**Note:** This book presents the proceedings of an international symposium organized in Strasbourg (October 24-25, 1988), with the aim of assessing present-day needs and uses for animal experimentation in medical and toxicological research. Also addressed is the need for fewer animals due to the advent of new technology and non-invasive investigational methods.

**Introduction to Laboratory Animal Science and Technology.** J.K. Inglis. New York, NY: Pergamon Press Ltd., 1980.

NAL Call No: SF406.I56.

**Note:** Textbook of humane laboratory animal care. Recommended for those with a minimal background in science, it covers aspects of animal care and biology as well as common laboratory equipment and procedures.

**Laboratory Animal Husbandry: Ethology, Welfare and Experimental Variables.** M.W. Fox. Albany, NY: State University of New York Press, 1986.

NAL Call No: SF406.F69.

**Note:** The author discusses the influence of the modern laboratory environment on the quality and validity of animal research. He cites evidence for the influence of cage size, social deprivation, feeding, population density, handling, ambient temperature, on experimental results. The book also includes chapters on pain and suffering, alternatives, and ethics.

**Laboratory Animal Medicine.** Edited by J.G. Fox, B.J. Cohen, and F.M. Loew. Orlando, FL: Academic Press, 1984.

NAL Call No: SF996.5.L33.

**Note:** Intended for students of veterinary medicine and other fields of biology, this text covers important information related to animals used in research. Topics include legislation, experimental methods, diseases, anesthesia, analgesia, euthanasia, biohazards, animal models, and genetic monitoring. Rodents, cats, dogs, primates, ferrets, birds, amphibians, reptiles, and fish are discussed in terms of their use in biomedical research.

**Laboratory Primate Handbook.** R.A. Whitney, Jr., D.J. Johnson, and W.C. Cole. New York, NY: Academic Press, 1973.

NAL Call No: SF407.P7W47.

**Note:** Provides general information for maintaining non-human primates in the laboratory. Includes chapters on taxonomy, housing, restraint, and diseases.



**The Merck Veterinary Manual.** 6th edition. Edited by C.M. Fraser. Rahway, NJ: Merck and Company, 1986.

NAL Call No: SF748.N47.

**Note:** Concise yet comprehensive reference work of current knowledge related to the diagnosis, treatment, toxicology, and pharmacology of domestic, exotic, and laboratory animals.

**The UFAW Handbook on the Care and Management of Laboratory Animals.** Edited by Universities Federation for Animal Welfare. 6th edition. New York, NY: Churchill Livingstone Inc., 1987.

NAL Call No: QL55.V5.

**Note:** A comprehensive guideline of all aspects of laboratory animal care and management. The book contains three major divisions: Part One discusses general principles for providing favorable environmental conditions, appropriate species selection, and regulations relating to animal care and management; Part Two presents guidelines for safe and humane animal handling and transport; Part Three examines the biology, husbandry, and laboratory procedures performed on common laboratory species including domestic and wild mammals, birds, reptiles, amphibians, and fish. The text is somewhat technical.

**Use of Laboratory Animals in Biomedical and Behavioral Research.** National Research Council. Washington, DC: National Academy Press 2101 Constitution Avenue, NW, Washington, DC, 1988.

NAL Call No: QL55.U74.

**Note:** A comprehensive guide covering the history, patterns of animal use, benefits, alternatives, regulatory issues and the use of pound animals.

## **ALTERNATIVES**

**Alternatives to Animal Use in Research, Testing, and Education.** Office of Technology Assessment, Congress of the United States. New York, NY: M. Dekker, 1988.

NAL Call No: QL51.2.U6A48.

**Note:** Analysis of the scientific, legal, economic, and ethical issues regarding alternatives to animal use for toxicity testing, biomedical and behavioral research, and education. Advisory panelists represent groups with widely varying interests and opinions such as animal welfare organizations, academic institutions, private industry, government agencies, and the concerned public. A fifty page summary of this book is also available from the Office of Technology Assessment.

**Alternatives to Current Uses of Animals in Research, Safety Testing, and Education: A Layman's Guide.** M.L. Stephens. Washington, DC: Humane Society of the United States, 1986.

NAL Call No: HV4708.S72.

**Note:** Overview of the major alternative methods of animal testing: human studies, *in vitro* techniques, mathematical and computer modeling, use of less sentient organisms, and physical and chemical techniques. The handbook also examines the current uses of animals in education, toxicity testing, and biomedical research. The concepts of replacement, reduction, and refinement are discussed.

**Alternatives to Laboratory Animals.** Available from: Fund for the Replacement of Animals in Medical Experiments (FRAME), Eastgate House, 34 Stoney Street, Nottingham, NG1 1NB, England.

NAL Call No: Z7994.L3A5.

**Note:** Quarterly journal covering all aspects of the development, introduction, and use of alternatives to animal research and testing. Includes some highly technical articles but many are comprehensible to the non-scientist. "Book Reviews" and "Selected Titles" sections provide current references for further reading on specific topics.

**Animal Experimentation: Improvements and Alternatives.** Edited by N. March and S. Haywood. Nottingham, England: Fund for the Replacement of Animals in Medical Experiments, 1985.

NAL Call No: QL55.A5.

**Note:** Proceedings of a 2 day symposium organized by the Liverpool Animal Ethical Group. Papers focus on alternatives to animal research by replacement of the use of whole animals, refinements in laboratory techniques, and reduction in the numbers of animals used.

**Benchmarks: Alternative Methods in Toxicology.** Edited by M.A. Mehlman. Princeton, New Jersey: Princeton Scientific Publishing Co., Inc. 1989.

NAL Call No: RA1231.T7B45.

**Note:** This volume, the first in a series, is intended to aid in the rapid identification, validation, and implementation of alternative methods in toxicology.

**In Vitro Models for Cancer Research: Carcinoma of the Prostate and Testis.** Edited by M. M. Webber. Boca Raton, Florida: CRC Press, Inc., 1988.  
NAL Call No: RC267.I48 v.5.

**Note:** This volume describes cell and organ culture systems that provide for the study of normal and neoplastic prostate and testes. The role of trace elements and hormones on the prostate are explored through in vitro techniques. Geographic distribution and the risk factors involved in prostate and testicular cancer are examined by several authors. They suggest ways in which in vitro testing can be used to study carcinogenesis, tumor prevention, and treatment.

**In Vitro Techniques in Research: Recent Advances.** Edited by J.W. Payne. Philadelphia, PA: Open University Press, 1989.  
NAL Call No: R853.T58I5.

**Note:** Papers in this book formed the greatest part of The Humane Research Trust Conference entitled *Recent advances in the Use of in vitro Techniques*. Discussed are several in vitro techniques using human tissues and cell culture.

**The Johns Hopkins Center for Alternatives to Animal Testing.** Office of Public Affairs, Johns Hopkins Medical Institutions, 615 North Wolfe Street, Baltimore, MD, 21205.  
NAL Call No: HV4701.J6.

**Note:** This quarterly newsletter reports new developments in alternative approaches to whole animal studies for evaluating the safety of chemical products.

**The Principles of Humane Experimental Technique.** W.M.S. Russell and R.L. Burch. Springfield, IL: Charles Thomas, 1959.  
NAL Call No: QL55.R8.

**Note:** The authors were the first to introduce the concepts of replacement, reduction, and refinement as they relate to the use of animals for research, testing, and education.

**Report of the Animal Alternatives Study Task Force.** Office of the President, University of California, Berkeley, CA, 94720.

**Note:** This report by the University of California (UC) was developed at the request of the state legislature, and examines alternatives to the use of animals in research. The intent of the report is to: 1) determine the process by which alternatives are developed at UC; 2) determine the extent to which alternatives are already used at the University; 3) propose modifications to the UC protocol review process in order to maximize the use of alternatives.

**Scientific Alternatives to Animal Experiments.** F. Lembeck. Ellis Horwood Limited. Chichester, West Sussex, PO19 1EB, England. 1989.

NAL Call No: QL51.A48.

**Note:** The pros and cons of using animals in medical research are explored. Their use in research areas, such as neurochemistry, genetics, allergies, drug development, and cancer research are thoroughly discussed. The question of whether animal experiments are still necessary is covered extensively. The current situation and the growing demand for alternatives are explored, as well as the advances in finding and utilizing these methods.

## **ANIMAL MODELS**

**Animal Models for Research on Contraception and Fertility.** N.J. Alexander. Hagerstown, MD: Harper and Row, Publishers, Inc., 1979.

NAL Call No: QP251.S993.

**Note:** This book is divided into sections: (I) Factors that affect studies in reproduction, (II) Comparative aspects of reproductive processes, (III) Use of animal models for research on contraception and reproduction, (IV) Animal models for specific research questions, (V) Techniques applied to reproduction, and (VI) Appendix. Some of the papers express controversial viewpoints on the choice of models or appropriate research techniques.

**Animal Models of Human Behavior.** Edited by G.C.L. Davey. London: John Wiley and Sons, 1983.

NAL Call No: BF671.A54.

**Note:** Explains the logic behind the comparison of animal and human behaviors. This comparison is explored in three sections: Section I - Conceptual and Historical Issues, Section II - Evolutionary Aspects and Section III - Neurobiological Aspects.

**Animals for Medical Research: Models for the Study of Human Disease.** B.M. Mitruka, H.M. Rawnsley, and D.V. Vadehra. New York, NY: John Wiley and Sons, 1976.

NAL Call No: RB125.M57.

**Note:** A rather technical discussion of the use of animals as models of human disease. It is a useful reference for determining the appropriateness of an animal model based on anatomical, physiological and biochemical similarities and differences between humans and the experimental animal.



**Bibliography of Induced Animal Models of Human Disease.** Edited by G. Hegreberg and C. Leathers. Pullman, WA: Dept. of Veterinary Microbiology and Pathology, College of Veterinary Medicine, Washington State University, 1981.

NAL Call No: Z7994.L3B53.

**Note:** This is designed to provide assistance to a wide spectrum of investigators using experimental animals. It represents a collection of induced animal models of human disease and disorders described in the literature. A list of reference books on animal models of human disease is included.

**Bibliography of Naturally Occurring Animal Models of Human Disease.** Edited by G. Hegreberg and C. Leathers. Pullman, WA: Dept. of Veterinary Microbiology and Pathology, College of Veterinary Medicine, Washington State University, 1981.

NAL Call No: Z7994.L3B5.

**Note:** This is designed to provide assistance to a wide spectrum of investigators using experimental animals. It represents a collection of naturally occurring animal models of human disease described in the literature. A brief list of reference books on animal models is included.

**The Biomedical Investigator's Handbook for Researchers Using Animal Models.** Foundation for Biomedical Research. Washington, DC: Foundation for Biomedical Research, 1987.

NAL Call No: QL55.B5.

**Note:** Written by and for investigators, this handbook examines factors related to research animals that influence the quality of experimental results such as pain, environmental conditions of the laboratory, animal health, surgery, and euthanasia. It also presents a concise summary of rules and regulations regarding animal research.

**The Future of Animals, Cells, Models, and Systems in Research, Development, Education, and Testing.** Washington, DC: National Research Council, 1977.

NAL Call No: QH324.N34.

**Note:** While recognizing that animal research has contributed to human welfare, the symposium members attempt to answer the following questions: Could lower life forms be used to achieve the same results? Are too many animals being used? How can experiments become more efficient in terms of animal use? Can whole animals be replaced by *in vitro* techniques or by computer simulation? How does animal treatment affect the quality of experimental results?

**Health Benefits of Animal Research.** Edited by W.I. Gay. Washington, DC: Foundation for Biomedical Research, 1985.

NAL Call No: QL55.H42.

**Note:** This book surveys the progress made in human health care through animal experimentation and discusses the dependence of modern biomedical research on animal models. Categorizes the use of six animal species by their appropriateness to the study of particular anatomical/physiological systems or disease conditions in humans. Provides guidance for the selection of appropriate experimental models.

**Mammalian Models for Research on Aging.** Institute of Laboratory Animal Resources (ILAR) Committee on Animal Models for Research on Aging. Washington, DC: National Academy Press, 1981.

NAL Call No: QP86.N38.

**Note:** The focus of this report is the relevance and appropriateness of selected mammals as models of human aging. The role of specific animal species in research on aging is explored, as well as comparative models of selected diseases of the human elderly.

**Man & Mouse: Animals in Medical Research.** W. Paton. New York, NY: Oxford University Press, 1984.

NAL Call No: HV4915.P38.

**Note:** A readable text calling for the responsible use of experimental animals. Topics include alternatives, pain, and ethical questions. The author also presents a basic discussion of what constitutes an "experiment" and "good science".

**Models for Biomedical Research: A New Perspective.** Committee on Models for Biomedical Research. Washington, DC: National Academy Press, 1985.

NAL Call No: R857.M3M9.

**Note:** Discusses the appropriateness and limitations of biological and non-biological models used in biomedical research. Includes the use of microorganisms, invertebrates, non-mammalian vertebrates, cell and tissue culture, and non-biological models to replace common laboratory animals. The text is somewhat technical.

**National Symposium on Imperatives in Research Animal Use: Scientific Needs and Animal Welfare.** Proceedings from a symposium held April 11-12, 1984 at the National Academy of Sciences Building, Washington, DC. National Institutes of Health Publication No. 85-2746.

NAL Call No: QL55.N38.

**Note:** A collection of essays on the humane care and use of research animals from a symposium organized by the National Institutes of Health. Major topics include the use of animal models in research, pain and its alleviation, and the evaluation of laboratory animal treatment.

**Nonhuman Primate Models for Human Diseases.** Edited by W.R. Dukelow. Boca Raton, Florida: CRC Pres, Inc., 1983.

NAL Call No: RB125.N66.

**Note:** Several authors provide topical papers on diabetes, viral disease, reproduction, birth defects, learning and language in nonhuman primates and their use as models for human disease and disorders.

**Nonmammalian Animal Models for Biomedical Research.** Edited by A. D. Woodhead and K. Vivirito. Boca Raton, Florida: CRC Press, Inc., 1989.

NAL Call No: QL55.N66.

**Note:** This book addresses the use of appropriate animal models in biomedical research. Authors show how a variety of nonmammalian animal models have been used to successfully investigate a variety of biomedical questions.

**The Role of Animals in Biomedical Research.** Edited by J.A. Sechzer. *Annals of the New York Academy of Sciences* 406:1-227 (1983).

NAL Call No: 500.N484.

**Note:** A collection of conference papers covering a variety of topics on the use of animals in biomedical research. Topics relating to drug testing, behavioral research using animal models, ethical issues, alternatives, and experimental design are emphasized.

**Setting Up An Animal Experiment.** S. Scher. *Veterinary Technician* 7(5):217-220 (1986).

NAL Call No: SF406.A5.

**Note:** Discusses considerations for planning experiments involving animals and factors that influence experimental results.



**Spontaneous Animal Models of Human Disease.** Edited by E.J. Andrews, B.C. Ward and N.H. Altman. New York, NY: Academic Press, 1979.  
NAL Call No: RB125.S66.

**Note:** This two volume set assesses the appropriateness of a given species for biomedical research and notes important differences between animal models and their human counterparts. The volumes are composed of 16 parts organized by body systems.

**Three Blind Mice, See How They Run: A Critique of Behavioral Research With Animals.** M.A. Giannelli. *Advances in Animal Welfare Science 1985*. Boston, MA: Martinus Nijhoff Publishers, 1986.  
NAL Call No: HV4701.A34.

**Note:** The author reviews the use of animals in behavioral research and offers suggestions for improvement.

**When To Experiment on Animals.** P. Bateson. *New Scientist* 109:30-32 (1986).  
NAL Call No: 472.N42.

**Note:** The author develops a decision-making model to determine whether a research project should be carried out on animals. Quality of research, certainty of medical benefit, and animal suffering are the criteria used to make decisions about conducting animal experiments.

## **ANIMAL CARE AND USE COMMITTEES**

**Animal Welfare Information Center Newsletter.** National Agricultural Library, AWIC, Room 205, Beltsville, MD 20705.  
NAL Call No: AHV4701.A952.

**Note:** This quarterly newsletter covers a wide range of topics relevant to the scientific community and the IACUC. Topics include: Animal welfare regulations, Animal Care and Use Committees, agricultural animal care, alternatives, legislation updates, upcoming meeting, and tips on searching and using the Center as an information resource.

**Effective Animal Care and Use Committees.** Edited by F.B. Orlans, R.C. Simmonds and W.J. Dodds. *Laboratory Animal Science*, Special Issue (January 1987). Available from: Scientists Center for Animal Welfare, 4805 St. Elmo Avenue, Bethesda, MD 20814  
NAL Call No: 410.9 P94.

**Note:** Selected papers from workshops sponsored by the Scientists Center for Animal Welfare. These focus on effective review of biomedical experiments to ensure humane and appropriate use of animals. Includes chapters concerning the objectives and activities of animal care and use committees, protocol review and animal pain, and roles of committee members (including lay members).

**Guidelines for Lay Members of Animal Care Committees.** Revised 1986. Nepean, Ontario: Canadian Federation of Humane Societies, 1986.  
NAL Call No: HV4735.G8.

**Note:** Outlines the functions and activities of animal care committees. Includes sections entitled "Lay committee members: special people with special problems", "How to review protocols", and "Pain".

**Guidelines on the Care of Laboratory Animals and Their Use for Scientific Purposes: IV - Planning and Design of Experiments.** Laboratory Animal Science Association and Universities Federation for Animal Welfare. London, England: Ennisfield Ltd., 1990.  
NAL Call No: SF406.G8 v.4.

**Note:** These guidelines are based on a consensus of views obtained from experimenters and statisticians. It gives some basic recommendations as to the planning, and design of experiments using animals, and how this can effect the outcome of the experiment.

**Institutional Administrator's Manual for Laboratory Animal Care and Use.** Bethesda, MD: U.S. Department of Health and Human Services, Public Health Service, National Institutes of Health, 1988. Available from: Office for Protection from Research Risks, National Institutes of Health, 9000 Rockville Pike, Building 31, Room 4B09, Bethesda, MD 20892.

**Note:** A concise guide for institutional administrators who supervise laboratory animal care and use programs. The manual addresses questions involving quality care, ethics, and legal requirements for animal care and use programs.

**New Paths.** The Animal Protection Institute of America, P.O. Box 22505, Sacramento, CA 95822.

NAL Call No: QL55.N39.

**Note:** This biannual newsletter serves as a vehicle for the exchange of information and ideas for those serving on animal care and use committees. Free to members of institutional animal care committees.

**Newsletter-Scientists Center for Animal Welfare.** SCAW, 4805 St. Elmo Avenue, Bethesda, MD, 20814.

NAL Call No: QL55.N48.

**Note:** Quarterly newsletter that promotes the humane treatment of animals used in research. A special section in each issue is devoted to animal care and use committees.

**Research Protocol Review for Animal Welfare.** F.B. Orlans. *Investigative Radiology* 22:253-258 (1987).

**Note:** Concise overview of the Animal Care and Use Committee (ACUC) review process. Addresses issues such as protocol review, investigators' concerns about ACUC's, and assessing and minimizing animal pain and distress.

**Science and Animals: Addressing Contemporary Issues.** Edited by H.N. Guttman, J.A. Mench, and R.C. Simmonds. Bethesda, MD: Scientists Center for Animal Welfare, 1989.

NAL Call No: HV4704.S33.

**Note:** Proceedings from a conference held by the Scientists Center for Animal Welfare in Washington, DC on June 22-25, 1988. "Community and Lay Members of Animal Care and Use Committees", "Animal Care and Use Committee Issues", and "Well-Being and Ethics" are three of the six sections contained in this volume. The community and lay member session was developed and presented entirely by active community and lay members of Animal Care and Use Committees.

**Scientific Perspectives on Animal Welfare.** Edited by J.W. Dodds and F.B. Orlans. New York, NY: Academic Press, 1982.

NAL Call No: HV4704.S34.

**Note:** A collection of papers from the First Conference on Scientific Perspectives in Animal Welfare sponsored by the Scientists Center for Animal Welfare. The publication discusses the roles and responsibilities of the investigator, the research institution (through its animal care and use committee), and the funding agency in providing humane care and treatment of laboratory animals.

## **ETHICS AND MORALS**

**Animal Experimentation: Ethical, Scientific and Legal Perspectives.** The University of New South Wales P.O. Box 1, Kensington, New South Wales, Australia, 2033. 1985. Phone (02) 697-2222.

**Note:** Proceedings of an animal experimentation seminar on ethical, scientific and legal perspectives of the use of animals in research. Several authors present articles on the philosophical, ethical, and scientific aspects of animal use in biomedical, agricultural and veterinary research.

**Animal Liberation: A New Ethic for Our Treatment of Animals.** P. Singer. New York, NY: Random House, 1975.

NAL Call No: HV4708.S49.

**Note:** A leading proponent of the animal rights movement, the author equates his view of current human attitudes toward animals with racism and sexism. The book includes a history of moral thought regarding animals and their treatment, and cites numerous instances of the use of stressful and painful procedures by researchers.

**Animal Rights and Human Morality.** B.E. Rollin. Buffalo, NY: Prometheus Books, 1981.

NAL Call No: HV4708.R64.

**Note:** This book outlines various moral concerns related to animals and their use by man. Part Two deals with natural and legal rights of animals. Part Three surveys the use of animals in research, testing, and education, and discusses alternatives, monitoring of research, and improving the treatment of research animals.

**Animal Rights - Opposing Viewpoints.** Edited by J. Rohr: San Diego, CA. Greenhaven Press, Inc., 1989.

NAL Call No: HV4711.A53.

**Note:** Presents thirty two articles debating the question of whether animals have rights. Opposing viewpoints are expressed on issues including: animal experimentation, farming, zoos, and hunting.

**Animals in Research: New Perspectives in Animal Experimentation.** Edited by D. Sperlinger. New York, NY: John Wiley & Sons, 1981.

NAL Call No: QL55.A56.

**Note:** Evaluates medical and scientific animal experimentation in a social, political and legal context; examines the most important areas of science and medicine in which animal models are used; and presents general issues related to animal experimentation.

**Animals, Men and Morals.** S. Godlovitch, R. Godlovitch and J. Harris. New York, NY: Tapinger, Inc., 1971.

NAL Call No: HV4711.G58.

**Note:** An animal rights perspective on, among other topics, the use of animals for experimentation and alternatives to their use. Also included are discussions of animal use in a moral and sociological context.



**Animals, Science, and Ethics.** Edited by S. Donnelley and K. Nolan. A Special Supplement to *The Hasting Center Report* (May/June 1990).

NAL Call No: HV4915.A5.

**Note:** Divided into five sections, this document addresses issues such as the ethical and moral status of animals, justification of animals in science, anthropomorphism, animal suffering, ethical review and policy issues in the use of animals in research, testing and education.

**Bioethics '89.** Published by Animal Welfare Foundation of Canada, 11 June Avenue, Cobourg, Ontario, Canada K9A 4M8, 1989.

**Note:** A report of the proceedings of an international symposium on the control of the use of animals in scientific research. Covers a broad range of topics, such as legislation, public opinion, ethics and animal care and use in the United Kingdom, Canada and the United States.

**The Case for Animal Experimentation: An Evolutionary and Ethical Perspective.** M.W. Fox. Berkeley, CA: University of California Press, 1986.

NAL Call No: HV4915.F67.

**Note:** The author endorses the humane use of research animals for human benefit. He includes essays on suffering, alternatives, and moral considerations. Chapter 5 presents the non-scientist with a general discussion of basic and applied research, the use of statistics in experimental inquiry, the research process, and the politics of scientific research.

**Contemporary Issues in Bioethics.** Edited by T. L. Beauchamp and L. Walters. Belmont, CA: Wadsworth Publishing Company, 1989.

NAL Call No: R724.C67.

**Note:** This third edition focuses on moral perplexities generated by the biomedical fields. The objective of this book is to make students aware of complex situations in biology and medicine that require moral reflection, judgement, or decision. The essays have been arranged in a debate-like format, with divergent viewpoints placed side-by-side, so that the reader can explore the strengths and weaknesses of alternative positions.

**Ethics and Animals.** Edited by H.B. Miller and W.H. Williams. Clifton, NJ: Humana Press, 1983.

NAL Call No: HV4711.E87.

**Note:** A collection of essays expressing divergent opinions on moral aspects of the human-animal relationship. Philosophers and scientists contribute their thoughts on killing, animal experimentation, and the rights of animals.

**The Ethics of Animal Experimentation: Proceedings of the Second CFN Symposium Held in Stockholm, Sweden, August 12-14, 1985.** *Acta Physiologica Scandinavica* 554:138-152(1986).

NAL Call No: QP1.A2 Suppl. 554.

**Note:** A collection of papers surveying ethical issues related to animal welfare. The articles, contributed by research scientists and animal rights advocates, represent a wide spectrum of opinions on the subject.

**Ethics of Animal Welfare in Research: The Institution's Attempt to Achieve Appropriate Social Balance.** E.D. Prentice, I.H. Zucker and A. Jameton. *The Physiologist* 29(2):17,19-21 (1986).

NAL Call No: 477.8P564.

**Note:** This article lists fifteen ethical principles adopted by the University of Nebraska Medical Center concerning animals used in research. The purpose of the principles is to "provide guidance to investigators and serve as the protocol review criteria employed by the IACUC".

**Farm Animal Welfare: Cattle, Pigs and Poultry.** D. Sainsbury. London, England: William Collins Sons and Co. Ltd, 1986.

NAL Call No: SF61.S2

**Note:** This book gives practical information and shows many systems of management exist, which are economic, provide good conditions for animals and their stockmen and can give a return on investment.

**Man and Mouse: Animals in Medical Research.** W. Paton. Oxford, England: Oxford University Press, 1984.

NAL Call No: HV4915.P38.

**Note:** A clear examination of the controversy of using animals in research. Professor Paton bases his case on the benefits gained for human beings and for animals. He discusses alternative methods and their limitations, as well as such complex questions as "What would happen if we stopped using animals in experiments?"

**Morals, Reason, and Animals.** S.F. Sapontzis. Philadelphia, PA: Temple University Press, 1987.

NAL Call No: HV4708.S23.

**Note:** A philosophical look at morals, reason, and man's use of animals. This book explains what "liberating" animals from human exploitation refers to and would amount to, why the standard justification of this exploitation are inadequate, and why we ought to liberate animals from that exploitation.

**Of Mice, Models and Men: A Critical Evaluation of Animal Research.** A.N. Rowan.  
Albany, NY: State University of New York Press, 1984.  
NAL Call No: HV4764.R69.

**Note:** Overview of the major issues surrounding the animal research controversy. The author attempts to "bridge the gap between researchers using animals and animal welfare advocates". Includes sections on toxicity testing and alternatives.

**Science, Medicine, and Animals.** Prepared for the Councils of the National Academy of Sciences and the Institute of Medicine by the Committee on the Use of Animals in Research. Washington, DC: National Academy Press, 1991.  
NAL Call No: in process.

**Note:** This document seeks to answer the most commonly asked questions about animal research, and to describe some of the ways in which animal research has benefitted, and continues to benefit, human and animal health.

**Use of Animals in Biomedical Research: The Challenge and Response.** AMA White Paper.  
American Medical Association, March 1988.  
NAL Call No: HV4932.U73.

**Note:** A concise overview of the pro-animal research perspective including background on the animal rights movement and justification for animal research.

**Veterinary Ethics.** J. Tannenbaum. Baltimore, MD: Williams and Wilkins, 1989.  
NAL Call No: SF756.39.T36.

Expression of all views and orientations are provided in the attempt to provide tools that will help veterinary students and practitioners to participate in ethical debates confronting the veterinary profession. The discussion focuses on ethics and the private practitioner, and does not address other practices, such as wildlife medicine, academic practice, international veterinary medicine, or government veterinary service.

## **LAW, LEGISLATION AND REGULATIONS**

**Animal Law.** D.S. Favre and M. Loring. London, England: Quorum Books, 1983.  
NAL Call No: KF390.5.A5F38.

**Note:** This book was written for those involved with animal issues, both lawyer and non-lawyer, as well as those individuals seeking an introduction to animal law. A comprehensive listing of cases are presented. Footnotes contain detailed information on sources for those interested individuals who may want to do further research on this subject.



**Animal Welfare Act of 1966 (PL 89-544).** For copies contact: Deputy Administrator, Regulatory Enforcement and Animal Care, USDA/APHIS, Room 206 Federal Building, P.O. Box 96464, Washington, DC 20090-6464.

**Note:** Authorizes the Secretary of Agriculture to regulate the transportation, sale, and handling of dogs, cats, and other animals intended for use in research or experimentation. Requires research facilities to register with the secretary and comply with any associated rules and regulations.

**Animal Welfare Legislation: Bills and Public Laws, 1990.** Prepared by K.J. Clingerman, Beltsville, MD: National Agricultural Library, October 1991.

NAL Call No: HV4701.A95 no.4

**Note:** This document provides a current, annotated listing of federal legislation relating to animal welfare. Annotations are derived from the bill text and are designed to reflect the general content of the document. Updated quarterly

**Food Security Act of 1985 (PL 99-198).** For copies contact: Deputy Administrator, Regulatory Enforcement and Animal Care, USDA/APHIS, Room 206, Federal Building, P.O. Box 96464, Washington, DC 20090-6464.

**Note:** Subtitle F discusses amendments to the Animal Welfare Act. It mandates the establishment of standards relating to the humane care of research animals, exercise for dogs, minimizing animal pain and distress, and the use of alternatives to painful procedures. Research facilities are directed to establish institutional animal committees and staff training programs. Non-compliance results in suspension of federal funding. An information service is established at the National Agricultural Library to provide information on improved animal experimentation methods.

**Health Research Extension Act of 1985 (PL 99-158).** *United States Statutes at Large*, v. 99, November 20, 1985, pp. 820-886.

**Note:** Directs the Secretary of Agriculture to establish animal research standards which include the formation of animal care committees. Requires grant and contract recipients to meet such standards. Requires NIH to study methods of biomedical research and experimentation which: 1) do not use animals; 2) reduce the numbers of animals used; or 3) are less painful to the animals used in research.

**An Introduction to Animal Law.** M. E. Cooper. Orlando, Florida: Academic Press Inc., 1987.

NAL Call No: K3620.C58.

**Note:** This book provides guidelines for those who wish to be pointed in the right direction but not to be overwhelmed by the details of law as it relates to animals.

**Public Health Service Policy on Humane Care and Use of Laboratory Animals.** Revised as of September 1986. Available from: Office for Protection from Research Risks, National Institutes of Health, 9000 Rockville Pike, Building 31, Room 4B09, Bethesda, MD 20892.

NAL Call No: QL55.P82.

**Note:** Public Health Service regulations on laboratory animal care derived from requirements set by the Health Research Extension Act of 1985.

## **LABORATORY ANIMALS**

**AALAS Training Manual Series Volume 1: Assistant Laboratory Animal Technician.**

Edited by D.M. Stark and M.E. Ostrow. Cordova, TN: American Association for Laboratory Animal Science, 1989.

NAL Call No: SF77.M35.

**Note:** This laboratory training manual contains definitions of common scientific terminology, basic animal anatomy and physiology with illustrations and terms, and a survey of common laboratory instrumentation. Also, the use of a variety of vertebrates for experimentation is discussed in terms of their specific use in research, common laboratory procedures involving these animals, housing requirements, and restraint and handling techniques.

**AALAS Training Manual Series Volume 2: Laboratory Animal Technician.** Edited by D.M. Stark and M.E. Ostrow. Cordova, TN: American Association for Laboratory Animal Science, 1990.

NAL Call No: SF77.L25.

**Note:** This volume covers some of the topics in Volume 1, but in more depth. It includes discussions of standard procedures related to management, health, basic science, and husbandry of many of the less common laboratory animal species, such as the amphibians and reptiles. Equipment, environmental equipment, and technical matters related to experimental and surgical procedures are also covered.

**AALAS Training Manual Series Volume 3: Laboratory Animal Technologist.** Edited by D.M. Stark and M.E. Ostrow. Cordova, TN: American Association for Laboratory Animal Science, 1991.

NAL Call No: SF77.L26.

**Note:** Management and supervision, diagnostics, and laboratory animal diseases are the focuses of this volume. Additional information is given on nutrition, equipment, anatomy, physiology, and experimental techniques. This series is designed to assist laboratory animal technical personnel prepare for certification examinations.

**Amphibians: Guidelines for the Breeding, Care, and Management of Laboratory Animals.**  
Institute of Laboratory Animal Resources, National Research Council. Washington, DC:  
National Academy of Sciences, 1974.  
NAL Call No: SF407.A45N37.

**Note:** This document assembles practical information on the breeding, care, and management of amphibians used in the laboratory. Major emphasis is on frogs and toads, with some attention given to salamanders and newts. This is a guide to users of amphibians in biological and biomedical research.

**Biology and Diseases of the Ferret.** J. G. Fox. Philadelphia, PA: Lea and Febiger, 1988.  
NAL Call No: SF407.F39B56.

**Note:** This book is intended for veterinarians and scientists who either provide veterinary care or utilize ferrets in biomedical research. It provides information on the history, diseases, husbandry, nutrition, physiology, anatomy, and selected uses of ferrets as an animal model.

**A Guide to Laboratory Animal Technology.** M.D. Buckland, L. Hall, A. Mowlem and B.F. Whatley. London, England: William Heinemann Medical Books Ltd., 1981.  
NAL Call No: QL55.G82.

**Note:** This has been written for animal technicians by animal technicians. Common laboratory species are discussed individually with reference to anatomy, reproduction, maintenance, methods of handling and identification. Specific disease is covered for each species, along with comprehensive of disease in general. All aspects of laboratory animal husbandry are addressed including equipment, SPF techniques, transport and law.

**ICLAS Guidelines on the Selection and Formulation of Diets for Animals in Biomedical Research.** Edited by M. E. Coates. London, England: International Council for Laboratory Animal Science, 1987.  
NAL Call No: QL55.I25.

**Note:** Nutritionists and toxicologists collaborate to review and summarize present knowledge of the interrelationships between the diet of a laboratory animal and its response to experimental treatment. Composition and form of the diet is presented as an important part of the experimental design.

**International Index of Laboratory Animals** (fifth edition). Edited by Michael F.W. Festing. United Kingdom: Laboratory Animals Ltd., 1990.  
NAL Call No: QL55.M4.

**Note:** Gives sources of animals used in laboratories throughout the world.

**Laboratory Animal Management: Marine Invertebrates.** National Research Council. Committee on Marine Invertebrates. Washington, DC: National Academy Press, 1981.  
NAL Call No: SF407.M37M37.

**Note:** This manual summarizes contemporary methods for maintaining and rearing marine invertebrates in the laboratory without immediate access to the sea. Part one contains general information, while part two contains information on specific animals or groups of animals. Detailed directions are given on the animals' care, handling, food requirements, and on dealing with some of the difficulties that may arise. This manual provides specific recommendations for sea anemones, mollusks, annelids, crabs, sea urchins.

**Laboratory Animal Management: Wild Birds.** National Research Council. Institute of Laboratory Animal Resources. Committee on Birds. Washington, DC: National Academy of Sciences, 1977.

NAL Call No: SF407.B53N37.

**Note:** This report covers information on the care and use of wild birds in captivity as biomedical and ecological research animals. The book summarizes special problems associated with procurement and identification of wild species and with their maintenance in captivity. It is designed to provide a sound basis for developing management programs that will be applicable to many species of wild birds that are used in the laboratory.

**Laboratory Manual for Basic Bi methodology of Laboratory Animals.** R. Hitzelberg, E. Lundgren and J. Phillips. Silver Spring, MD: MTM Associates, Inc., 1987.

NAL Call No: SF406.H5 vol.1 and vol.2.

**Note:** This pictorial guide is divided into two volumes; the first containing information on mice, rats, guinea pigs and rabbits; and the second on dogs, cats and primates. Methods for restraint, injection routes, blood collection, and euthanasia are covered for each species.

**Standards in Laboratory Animal Management.** Hertfordshire, England: The Universities Federation for Animal Welfare, 1984.

NAL Call No: SF406.S73.

**Note:** Proceedings of a Symposium organized by The Laboratory Animal Science Association and The Universities Federation for Animal Welfare. Several authors provide many examples of good science and animal welfare going hand in hand. Sessions cover rats, mice, rabbits, guinea pigs, cats, dogs, and primates.



## **PRIMATES**

**Animal Lifestyles and Anatomies: The Case of the Prosimian Primates.** Edited by C.E. Oxnard, R.H. Crompton and S.S. Lieberman. Seattle and London: University of Washington Press, 1990.

NAL Call No: QL737.P9095.

**Note:** A species by species look at prosimian primate behavior, habitat, and diet, in relation to anatomy.

**Housing, Care and Psychological Wellbeing of Captive and Laboratory Primates.** Edited by E.F. Segal. San Diego, CA: Noyes Publications, 1989.

NAL Call No: QL737.P9H78.

**Note:** This provides comprehensive coverage of many aspects of captive and laboratory behavior. Clearly explores the concepts of environmental enrichment and its connection with proper housing, care, and psychological wellbeing.

**National Institutes of Health Nonhuman Primate Management Plan.** Office of Animal Care and Use. Bethesda, MD: National Institutes of Health, 1991.

NAL Call No: HV4758.N3.

**Note:** This document presents the results of a survey of nonhuman primate utilization in research and provides recommendations from a diverse group of researchers, care providers, and administrators. The Plan was developed to aid in meeting the 1985 congressional mandate for improving the "psychological well-being" of nonhuman primates.

**Primate Behavior: Developments in Field and Laboratory Research.** Edited by L.A. Rosenblum. New York, NY: Academic Press, Inc., 1975.

NAL Call No: QL785.5.P7P7.

**Note:** Several authors present papers on such topics as, vocalization, facial expressions, feeding behavior, population structure and social organization. Both field and laboratory research are addressed.

**Through the Looking Glass: Issues of Psychological Wellbeing in Captive Nonhuman Primates.** Edited by M.A. Novak and A.J. Petto. Washington, DC: American Psychological Association, 1200 17th Street, NW. 1991. (In Press)

**Note:** This book addresses the issues and concerns of nonhuman primate psychological wellbeing.



**Well-being of Nonhuman Primates in Research.** Edited by J.A. Mench and L. Krulisch. Bethesda, MD: Scientists Center for Animal Welfare, 1990.  
NAL Call No: QL737.C22C36.

**Note:** Proceeding from a conference held by the Scientists Center for Animal Welfare in Bethesda, Maryland on June 23, 1989. Regulatory perspectives, biological perspectives, veterinary perspectives and financial perspectives concerning nonhuman primates are addressed.

## **CANINES AND FELINES**

**Canine Research Environment.** Edited by J.A. Mench and L. Krulisch. Bethesda, MD: Scientists Center for Animal Welfare, 1990.  
NAL Call No: QL737.C22C36.

**Note:** Articles from a conference held by the Scientists Center for Animal Welfare in Bethesda, Maryland on June 22, 1989. Four areas are addressed: Regulatory Issues, Environmental Enrichment, Management, and Effects of Exercise Programs.

**The Complete Book of Cat Health.** W.J. Kay and E. Randolph. 866 Third Avenue, New York, NY: Macmillan Publishing Company, 1985.  
NAL Call No: SF447.K39.

**Note:** A guide to owners and potential owners of cats. It covers a broad range of topics, from behavior and reproduction to disease and health care. Contains useful facts, charts, and checklists to aid in maintaining your pet cat.

**The Complete Book of Dog Health.** W.J. Kay and E. Randolph. 866 Third Avenue, New York, NY: Howell Book, 1990.  
NAL Call No: SF991.C66.

**Note:** A comprehensive encyclopedia of dog care. Divided into three sections, the book discusses dog health, people-pet relationships, and disease and illness. There are reference guides, charts, and checklists to aid the dog owner in keeping their dog happy and healthy.

**Manual of Clinical Procedures in the Dog and Cat.** S.E. Crow and S.O. Walshaw.  
Philadelphia, PA: J.B. Lippincott Company, 1987.  
NAL Call No: SF991.C76.

**Note:** The purpose of this manual is to provide information on the correct use of diagnostic and therapeutic procedures in veterinary practice. It is a useful tool for veterinary technologists, veterinary students, as well as veterinarians and veterinary technicians in small animal practice or laboratory animal care facilities. The text is organized by procedures, with each described in a step-by-step manner. The scope of the manual is limited to procedures that can be completed in veterinary facilities and that require only modest surgical skills.

## **TOXICOLOGY**

**Animal Testing and Consumer Products.** H.J. Welsh. Investor Responsibility Research Center Inc. 1755 Massachusetts Ave., N.W., Washington, DC 20036, 1990.  
NAL Call No: HV4915.W43.

**Note:** This book provides an overview of the animal protection movement, and the laws, regulations and legislation governing animal testing. Alternatives, consumer product safety testing, company profiles, and directories of organizations are all presented.

**Cellular and Molecular Toxicology and In Vitro Toxicology.** Edited by D. Acosta. Boca Raton, FL: CRC Press, Inc., 1990.  
NAL Call No: RC677.C44.

**Note:** This book reflects the importance of understanding the toxicity of xenobiotics at levels beyond the whole animal. The purpose of this book is to focus on the cellular and molecular effects of toxicants on living systems and to highlight the use of in vitro systems to assess the toxicity of xenobiotics.

**A Guide to General Toxicology** (Karger Continuing Education Series, Vol. 5). Edited by J.K. Marquis. New York, NY: Karger, 1989.  
NAL Call No: RA1211.G85.

**Note:** This book is designed to serve as a textbook for toxicology students. It is also useful for the scientist working in related areas who need a working knowledge of the basic principles of toxicology. Numerous subject areas are covered including, drug actions, tissue morphology, clinical physiology, and the functional characteristics of organ systems.

**Information Resources in Toxicology.** P. Wexler. New York, NY: Elsevier Science Publishing Co., Inc., 1988.

NAL Call No: RA1193.4.W49.

**Note:** A sourcebook addressed to anyone who needs to know where to look for toxicology information. There is both U.S. and international coverage of resources.

**Introduction to Toxicology.** J.A. Timbrell. Philadelphia, PA: Taylor and Francis Inc., 1989.

NAL Call No: RA1211.T55.

**Note:** Designed for the novice toxicologist and student who wishes to become familiar with the subject as a whole. It covers such topics as, toxic compounds, drug toxicity, industrial toxicology, contaminants, pesticides, environmental pollutants, natural toxins, household products, and toxicity testing.

**In Vitro Toxicology: Model Systems and Methods.** Edited by C.A. McQueen. Caldwell, New Jersey: The Telford Press, Inc., 1989.

NAL Call No: RA1199.4.I5I5.

**Note:** This book brings together all the major in vitro models which have been developed and are currently being used to identify and study toxic and pharmacologic experiments. Each section covers an organ system and chapters within the section detail the methodology, advantages and disadvantages of each model as well as provide examples of the model's use.

**In Vitro Toxicology: New Directions.** Edited by A.M. Goldberg. New York, NY: Mary Ann Liebert, Inc., Publishers, 1989.

NAL Call No: RA1199.A49 v.7.

**Note:** Symposium and poster presentations from the Center for Alternatives to Animal Testing, comprise this book. Product development, progress in neurotoxicity, dermal toxicity, hepatic toxicity, immunotoxicity, ocular toxicity, and developmental toxicity, are subjects that are addressed.

**Recent Advances in Nervous System Toxicology.** Edited by C.L. Galli, L. Manzo and P.S. Spencer. New York, NY: Plenum Publishing Corporation, 1988.

NAL Call No: QH301.N32 v100.

**Note:** This volume addresses aspects of the adverse actions of chemical agents on the central and peripheral nervous systems in developing and mature organisms.

**The Veterinary Clinics of North America/Food Animal Practice: Clinical Toxicology.** Edited by G.E. Burrows. Philadelphia, PA: W.B. Saunders Company, 1989.

NAL Call No:SF601.V535 v.5 No.2.

**Note:** Several authors contribute to this text of livestock and food animal toxicology. They address topics such as (but not limited to), ammonia toxicity, plant toxicity, photosensitization, algae intoxication of livestock and waterfowl, insecticidal toxicity, and drug and chemical residues.

**Veterinary Toxicology** 3rd edition. D.J. Humphreys. Philadelphia, PA: Bailliere Tindall, 1988.

NAL Call No: SF757.5.H8.

**Note:** This book aims to serve as a textbook for the student, a source of information for the practitioner, and a textbook for the research worker. Coverage includes topics such as, inorganic compounds, toxic vapors, organic compounds, poisonous plants, mycotoxins, venomous bites and stings and radioactive materials. Several appendices cover topics consisting of clinical signs, antidotes, effects of pesticides, and toxic plants

**Veterinary Toxicology: A Manual for Veterinarians.** P.K. Gupta. New Delhi, India: Cosmo Publications, 1988.

NAL Call No: SF757.5.G8.

**Note:** This book is designed primarily as a textbook for toxicology students, and as reference for emergency treatment of various animal poisons that veterinarians come across during practice. The book is divided into three parts. Part I covers the scope of veterinary toxicology, professional organizations and law relevant to the veterinarian. Part II provides extensive coverage on toxins and toxic substances, and the problems they cause. Part III covers information on treatment and antidotal therapy.

## **ANIMAL BEHAVIOR, ANIMAL THINKING**

**Animal Behavior in the Laboratory.** P. Silverman. New York, NY: Pica Press, 1978.

NAL Call No: QL751.S55.

**Note:** The principal aim of this book is to serve as a guide to behavior as an applied science. It gives practical guidance on methods of detecting changes in animal behavior. Issues are addressed such as, behavior as a science and the relationship of animal behavior to human behavior.



**Animal Learning: An Introduction.** S. Walker. New York, NY: Routledge and Kegan Paul Inc., 1987.

NAL Call No: QL785.W1438.

**Note:** This textbook is designed to introduce undergraduates in psychology to research into animal learning. The book covers the main phenomena of habituation, Pavlovian conditioning, instrumental learning, biological functions of learning, and the relation of mechanisms to processes of attention, perception and memory.

**Animal Thinking.** Donald R. Griffin. Cambridge, Massachusetts: Harvard University Press, 1984.

NAL Call No: QL785.G716.

**Note:** This book explores ideas and questions, such as: What do animals think? Do animals only think of obtaining food and avoiding predators or do they imagine? What do we mean when we talk about communication. What kind of knowledge do animals have of each other.

**Farm Animal Behaviour and Welfare.** A.F. Fraser and D.M. Broom. London, England: Bailliere Tindall, 1990.

NAL Call No: SF756.7.F72.

**Note:** This is a comprehensive guide to the behaviour of farm animals and to the evaluation of their welfare. It provides farmers, veterinary surgeons and biologists with practical information about behaviour and its relationship to animal production, disease diagnosis, management and humane care. Emphasis has been given to providing a thorough scientific base to the contents of this book.

**Farm Animal Ethology: A Source Book.** S. E. Cregier. Ontario, M3J1P3, Canada: Captus Press Inc., 1989.

NAL Call No: SF81.C73.

**Note:** This is intended to help ethology researchers locate information about their area of interest, as well as possible funding and probable opportunities. The guide is restricted to five domestic species: horse, cow, sheep, pig, and fowl.

**Information Processing in Mammalian Auditory and Tactile Systems.** Edited by M. Rowe and L. Aitkin. New York, NY: Wiley-Liss, Inc., 1990.

NAL Call No: QP461.B66.

**Note:** This book compiles papers from the Proceedings of a Boden Research Conference held in Thredbo, New South Wales, Australia, February 1-3, 1989. It explores the shared and contrasting strategies for signalling and processing sensory information and the physiological organization within the auditory and tactile systems. It book presents recent data in the areas of, cochlear function, intensity, and deafness.



**Managing the Behavior of Animals.** Edited by P. Monaghan and D. Wood-Gush. New York, NY: Chapman and Hall, 1990.

NAL Call No: QL751.M218.

**Note:** This book brings together a collection of reviews that deal with how an understanding of the methods, theories and facts provided by the scientific study of behavior can help manage the behavior of animals. This book looks at this subject in such areas as improving productivity in agriculture and aquaculture, improving the welfare of animals, dealing with pets, promoting conservation of endangered species, and finding humane solutions to deal with animal pests. The book is aimed at students and researchers studying animal behavior, zoology, agriculture, aquaculture, veterinary science, and psychology.

**The Question of Animal Awareness: Evolutionary Continuity of Mental Experience.** D.R. Griffin. New York, NY: The Rockefeller University Press, 1981.

NAL Call No: QL776.G7.

**Note:** A comprehensive inquiry into the question of animal awareness. How to gather objective and verifiable data on animal thinking and behavior is addressed.

**Whale Songs and Wasp Maps: The Mystery of Animal Thinking.** J. Mortenson. New York, NY: E. P. Dutton, 1987.

NAL Call No: QL785.M67.

**Note:** Written in a story-book fashion, this book explains the development of the brain and the thinking process of animals.

## **FARM ANIMALS**

**Animal Production and Management.** R.K. Barrick and H.L. Harmon. New York, NY: McGraw-Hill Book Company, 1988.

NAL Call No: SF61.B35.

**Note:** This book was developed as a textbook to emphasize the management of animals on farms and ranches, not just the production of animals and animal products. It highlights basic production and dwells on management skills and techniques.

**Farm Animal Welfare: Crisis or Opportunity for Agriculture?** M. Halverson. St. Paul, MN: University of Minnesota, Department of Agricultural and Applied Economics, 1991.

NAL Call No: HD1761.A1M5.

**Note:** This document distinguishes between animal welfare and animal rights. It looks at the designing and manufacturing technologies which will meet welfare criteria animal, and still be profitable for the farmer. The emphasis is on the welfare of pigs. Future directions are addressed.

**Farm Animal Welfare: Who Cares? How?** Edited by J.R. Hill and W.B. Sainsbury. Cambridge, England: The Cambridge Centre for Animal Health and Welfare, 1990.  
NAL Call No: HV4758.F37.

**Note:** This book consists of a survey of opinions about farm animal welfare; the background and prognosis for improvement. The intent is to increase understanding, and stimulate improvement in farm animal welfare.

**Guide for the Care and Use of Agricultural Animals in Agricultural Research and Teaching.** Champaign, IL: Consortium for Developing a Guide for the Care and Use of Agricultural Animals in Research and Teaching, 1988.  
NAL Call No: QL55.G8.

**Note:** This guide was developed by and for those using agricultural animals in research and teaching. It is meant to serve as an independent reference for the care and use of agricultural animals. It provides information on the most common agricultural animals under a variety of teaching and research conditions.

**Livestock Husbandry Techniques.** J.I. McNitt. London, England: Granada Publishing, 1983.  
NAL Call No: SF61.M33.

**Note:** This book describes how to carry out the practices which are necessary in handling farm animals. The basic practices of animal husbandry are addressed in a 'how to' manner. Emphasis is on how to perform competently and safely essential techniques such as cleaning and disinfection, castration, record keeping, dipping and much more.

**Management and Welfare of Farm Animals.** Universities Federation for Animal Welfare. London, England: Bailliere Tindall, 1988.  
NAL Call No: SF61.M35.

**Note:** The book concentrates on those animals farmed in Europe, and describes strategies designed to improve the efficiency and standards of farm animal production, as well as details on how animals should be kept and cared for. Emphasis is given to the welfare implications of modern husbandry techniques and promotes a humane attitude for those responsible for the care, management and welfare of farm animals.

**Normal Physiological Values for Conscious Pigs Used in Biomedical Research.** J.P. Hannon, C.A. Bossone and C.E. Wade. San Francisco, CA: LAIR, Military Trauma Research, 1989.  
NAL Call No: SF768.2.S95H3.

**Note:** This booklet contains reference values for over 100 physiologic or related variables. Included were measurements of body composition, fluid volumes, blood gas, hormone levels, hemodynamics, renal function and more.

**The Science of Animal Husbandry.** J. Blakely and D. Bade. Reston, VA: Reston Publishing Company, Inc., 1990.

NAL Call No: SF61.B56.

**Note:** This is an introductory textbook for the college student. The intent of this book is to provide a condensed, highly illustrated, easy-to-read version of animal science, while keeping in mind the needs of the instructor.

**Scientific Farm Animal Production.** R. E. Taylor and R. Bogart. New York, NY: Macmillan Publishing Company, 1988.

NAL Call No: SF61.B63.

**Note:** This book gives an overview of the biological principles applicable to animal science with chapters on reproduction, genetics, nutrition, lactation, end breeding, and management of beef cattle, dairy cattle, horses, sheep, swine, poultry, and goats. It is designed for the introductory animal science course taught at universities and colleges.

**Swine in Biomedical Research.** Edited by M.E. Tumbleson. New York, NY: Plenum Press, 1986.

NAL Call No: RB125.C68.

**Note:** This book is composed of three volumes. Papers are presented by several hundred authors. This work contains comprehensive coverage of swine and their use as models for a variety of biomedical studies, such as alcoholism, diabetes, digestive disorders, organ transplantation, atherosclerosis, gingivitis, hypertension, exercise, hypotension, cancer, osteochondrosis, dermal healing and septic shock. This book was designed as a reference to be used as a data base for future investigations.

**1984 Yearbook of Agriculture Animal Health: Livestock and Pets.** Edited by J. Hayes. Washington, DC: U.S. Government Printing Office, 1984.

NAL Call No: 1 Ag84y 1984.

**Note:** This book was written to provide helpful information on animal health to pet and livestock owners. Poultry, pet birds, cattle, sheep, goats, swine, fish, rabbits, pet rodents, ferrets, and horses are all covered.

## **DISEASE AND PATHOLOGY**

**Parasites.** O. W. Olsen. Mineola, NY: Dover Publications, Inc., 1986.

NAL Call No: 757.04.

**Note:** Intended as a text and reference book for students of biology and parasitology, as well as veterinarians, extension agents, wildlife personnel and researchers. The book presents basic principles of parasitology, including classification, morphology, life cycles, and transmission.

**Parasites of Laboratory Animals.** R.J. Flynn. Ames, IA: Iowa State University Press, 1973.  
NAL Call No: SF810.A3F6.

**Note:** Designed to be a readily accessible guide for those in laboratory animal professions. Parasites of the mouse, rat, hamster, guinea pig, rabbit, dog, cat, rhesus monkey, and chicken are covered, while only the commonest parasites of other rodents, other primates, reptiles, amphibians, and fishes are covered.

**Pathology of Domestic Animals.** Third Edition. K. V. F. Jubb, P. C. Kennedy and N. Palmer. Orlando, FL: Academic Press, Inc., 1985.  
NAL Call No: SF769.J82.

**Note:** Several authors provide their expertise and knowledge in the area of domestic animal pathology. They provide extensive coverage of the pathology of diseases that infect tissues and organ systems.

**Reproductive Pathology of Domestic Mammals.** K. McEntee. San Diego, CA: Academic Press, Inc., 1990.  
NAL Call No: SF871.M3.

**Note:** This book is intended to aid veterinary students, teachers, researchers, veterinarians, and pathologists. Contains comprehensive coverage of normal and abnormal, anatomy and pathology of domestic mammalian reproductive systems.

**Veterinary Parasitology.** G.M. Urquhart, J. Armour, J.L. Duncan, A.M. Dunn and F.W. Jennings. Essex, England: Longman Scientific and Technical, 1987.  
NAL Call No: SF810.A3V46.

**Note:** Veterinary helminthology, entomology, and protozoology of domestic species are all discussed. Intended for those involved in the diagnosis, treatment and control of parasitic diseases. The last chapters review aspects of veterinary parasitology, epidemiology, immunity, anthelmintics, ectoparasitocides and laboratory diagnosis.

## **BIBLIOGRAPHIES**

**Animal Experimentation and Animal Rights.** Compiled by R. Friedman. Phoenix, AZ: Oryx Press, 1987.  
NAL Call No: Z7164.C45A55.

**Note:** Contains only materials written at the undergraduate level.

**A Bibliography for the Use of Non-Affiliated Members of Institutional Animal Care and Use Committees.** Single copies available free from: The Animal Welfare Institute, P.O. Box 3650, Washington, DC 20007.



**A Bibliography of Human/Animal Relations.** S.R. Kellert and J.K. Berry. Lanham, MD: University Press of America, Inc., 1985.  
NAL Call No: Z7994.A56K44.

**A Bibliography on Animal Rights and Related Matters.** C.R. Magel. Lanham, MD: University Press of America, Inc., 1981.  
NAL Call No: Z7164.C45.M35.

**Laboratory Animal Welfare.** Compiled by F.P. Gluckstein. National Library of Medicine, 1985, 1986, 1987, and 1988. Available from: Specialized Bibliography Series, Reference Section, National Library of Medicine, Bethesda, MD 20894.  
NAL Call No: Z7994.L3G58.

**Laboratory Animal Welfare Bibliography.** Prepared by the Scientists Center for Animal Welfare, December 1988. Distributed by: SCAW, 4805 St. Elmo Avenue, Bethesda, MD, 20814.  
NAL Call No: Z7994.L3S35.

**Pain, Anesthesia, and Analgesia in Common Laboratory Animals.** Prepared by F.P. Gluckstein. National Library of Medicine, 1986 and 1988. Available from: Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402.  
NAL Call No: Z7994.L3G5.

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**Alternatives to the Use of Animals in Research and Education.** Prepared by K. Engler and J. Larson, *Special Reference Briefs*: SRB 88-11 (September 1988).  
NAL Call No: aS21 D27S64.

**Animal Care and Use Committees.** Prepared by K.J. Clingerman, *Special Reference Briefs*: SRB 90-06 (March 1990).  
NAL Call No: aS21 D27S64.

**Animal Euthanasia.** Prepared by C.P. Smith and J. Larson, *Special Reference Briefs*: SRB 91-02 (November 1990).  
NAL Call No: aS21 D27S64.

**Animal Models in Biomedical Research: Swine.** Prepared by C.P. Smith. *Special Reference Briefs*: SRB 91-06 (March 1991).  
NAL Call No: aS21 D27S64.



**Animal Models of Disease** January 1979-December 1990. Prepared by C.P. Smith. *Quick Bibliography Series*: QB 91-42 (February 1991).  
NAL Call No: aZ5071 N3.

**Animal Welfare Legislation and Regulation 1979-1991.** Prepared by J.C. Swanson, *Quick Bibliography Series*: QB 91-63 (March 1991).  
NAL Call No: aZ5071 N3.

**Audio-Visuals Relating to Animal Care, Use and Welfare.** Prepared by D.J. Berry, *AWIC Series No. 7* (April 1991).  
NAL Call No: aHV4701 A95.

**Beef Cattle Housing and Facilities** January 1979 - August 1990. Prepared by J.C. Swanson, *Quick Bibliography Series*: QB 91-20 (November 1990).  
NAL Call No: aZ5071 N3.

**Dairy Cattle Housing and Facilities** January 1979 - August 1990. Prepared by J.C. Swanson, *Quick Bibliography Series*: QB 91-19 (November 1990).  
NAL Call No: aZ5071 N3.

**The Draize Eye-Irritancy Test.** Prepared by J.C. Swanson, *Special Reference Briefs*: SRB 91-03 (December 1990).  
NAL Call No: aS21 D27S64.

**Equine Housing and Facilities** January 1979 - August 1990. Prepared by K.J. Clingerman, *Quick Reference Briefs*: QB 91-05.  
NAL Call No: aS21 D27S64.

**Ethical and Moral Issues Relating to Animals 1979-1988.** Prepared by K.J. Clingerman, *Quick Bibliography Series*: QB 90-48 (May 1990).  
NAL Call No: aZ5071 N3.

**Ferrets as Laboratory Animals: A Bibliography.** Prepared by K.J. Clingerman, J.G. Fox and M. Walke, *Bibliographies and Literature of Agriculture*: Number 113 (September 1991).  
NAL Call No: aZ5076.A1U54.

**Information Resources for Environmental Enrichment of Primates: 1987-1990.** Prepared by J.C. Swanson, F.P. Gluckstein and J.G. Miller, (March 1991).  
NAL Call No: in process.

**The LD50 (Median Lethal Dose) and LC50 (Median Lethal Concentration) Toxicity Test, 1980-1990.** Prepared by K.J. Clingerman, *Special Reference Briefs*: SRB 90-12 (September 1990).  
NAL Call No: aS21 D27S64.

**Laboratory Animal Facilities and Management** January 1979 - February 1990. Prepared by K.J. Clingerman, *Quick Bibliography Series*: QB 90-55 (May 1990).  
NAL Call No: aZ5071 N3.

**Poultry Housing and Facilities** January 1979 - August 1990. Prepared by K.J. Clingerman, *Quick Bibliography Series*: QB 91-02 (October 1990).  
NAL Call No: aZ5071 N3.

**Sheep and Goat Housing and Facilities** January 1979 - August 1990. Prepared by J.C. Swanson, *Quick Bibliography Series*: QB 91-22 (November 1990).  
NAL Call No: aZ5071 N3.

**Stress in Cattle** January 1979 - August 1990. Prepared by J.C. Swanson, *Quick Bibliography Series*: QB 91-18 (November 1990).  
NAL Call No: aZ5071 N3.

**Stress in Horses** January 1979 - August 1990. Prepared by K.J. Clingerman, *Quick Bibliography Series*: QB 91-06 (October 1990).  
NAL Call No: aZ5071 N3.

**Stress in Poultry** January 1979 - August 1990. Prepared by K.J. Clingerman, *Quick Bibliography Series*: QB 91-01 (October 1990).  
NAL Call No: aZ5071 N3.

**Stress in Sheep and Goats** January 1979 - August 1990. Prepared by J.C. Swanson, *Quick Bibliography Series*: QB 91-21 (November 1990).  
NAL Call No: aZ5071 N3.

**Stress in Swine** January 1979 - August 1990. Prepared by J.C. Swanson, *Quick Bibliography Series*: QB 91-16 (November 1990).  
NAL Call No: aZ5071 N3.

**Swine Housing and Facilities** January 1985 - August 1990. Prepared by J.C. Swanson, *Quick Bibliography Series*: QB 91-15 (November 1990).  
NAL Call No: aZ5071 N3.

**Toxoplasmosis: A Protozoan Disease of Animals and Man.** Prepared by J.C. Swanson, *Special Reference Briefs*: SRB 90-07 (April 1990).  
NAL Call No: aS21 D27S64.

**Training Materials for Animal Facility Personnel** January 1979 - August 1990. Prepared by K.J. Clingerman, *Quick Bibliography Series*: QB 91-07 (October 1990).  
NAL Call No: aZ5071 N3.

**Transport and Handling of Livestock** January 1979 - February 1990. Prepared by K.J. Clingerman, *Quick Bibliography Series*: QB 90-39 (April 1990).  
NAL Call No: aZ5071 N3.

**Welfare, Care and Husbandry of Cattle** January 1979 - August 1990. Prepared by J.C. Swanson, *Quick Bibliography Series*: QB 91-17 (November 1990).  
NAL Call No: aZ5071 N3.

**Welfare of Experimental Animals** January 1985 - March 1991. Prepared by K.J. Clingerman, *Quick Bibliography Series*: QB 91-83 (April 1990).  
NAL Call No: aZ5071 N3.

**Welfare of Poultry** January 1979 - August 1990. Prepared by K.J. Clingerman, *Quick Bibliography Series*: QB 91-03 (October 1990).  
NAL Call No: aZ5071 N3.

**Welfare of Horses** January 1979 - August 1990. Prepared by K.C. Clingerman, *Quick Bibliography Series*: QB 91-04 (October 1990).  
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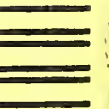
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